

CLAIMS

1) A pulley (7) for a continuously-variable-ratio drive (1), comprising a fixed half-pulley (7b) fitted to a shaft (3) of said drive; a movable half-pulley (7a) mounted to slide axially with respect to said fixed half-pulley (7b) to define with it a V groove (9) of variable size; and a torque-sensitive, axial thrust compensating device (20) comprising first cam means (22, 26) interposed between said fixed half-pulley (7b) and said movable half-pulley (7a) to generate axial thrust on said movable half-pulley (7a) in the compression direction of the belt (C) in response to a drive torque; characterized in that said compensating device (20) comprises second cam means (22, 25) interposed between said fixed half-pulley (7b) and said movable half-pulley (7a) to generate axial thrust on said movable half-pulley (7a) in the compression direction of the belt (C) in response to a braking torque.

2) A pulley as claimed in Claim 1, characterized in that said first and said second cam means comprise at least one slot (21) carried by one of said half-pulleys (7a), and at least one cam follower (22) carried by the other of said half-pulleys (7b) and engaging said slot (21); said first and said second cam means being defined by respective sides (25, 26) defining said slot (21) circumferentially and sloping in opposite directions at least along respective portions (31).

3) A pulley as claimed in Claim 2, characterized in that said slot (21) comprises a substantially axial portion (29) engaged by said cam follower (22) in a maximum-speed range.

5 4) A pulley as claimed in Claim 2, characterized in that said cam follower (22) is carried by a hub (15) of said fixed half-pulley (7b); and in that said slot (21) is formed in a sleeve (17) integral with said movable half-pulley (7a) and coaxial with, and sliding on, said
10 hub (15) of said fixed half-pulley (7b).

5) A continuously-variable-ratio drive, characterized by comprising an input shaft (2); a drive pulley (6) connectable to said input shaft (2); an output shaft (3); and a driven pulley (7) connected to the
15 output shaft (3); each of said pulleys (6, 7) being defined by a fixed half-pulley and a movable half-pulley (6a, 6b; 7a, 7b) defining between them a groove (8; 9) of variable size for a V belt (C); characterized in that at least one of said pulleys (6, 7) comprises a torque-
20 sensitive, axial thrust compensating device (20) as claimed in Claim 1.

6) A drive as claimed in Claim 5, characterized by comprising a centrifugal control device (13) acting on said drive pulley (6) to vary the size of said groove (8)
25 of said drive pulley (6) as a function of the speed of said input shaft (2); said half-pulleys (7a, 7b) of said driven pulley (7) being loaded axially towards each other by a spring (14); and said compensating device (20)

acting on said half-pulleys (7a, 7b) of said driven pulley (7) in the same direction as said spring (14).